Ch.5 Cumulative warm up NAME:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Formulas:**

Simple Interest: I = P x R x T Compound Interest:

1. John opens a checking account and deposits $3000. He earns simple interest at a rate of 4 ¾ %.
   1. How much interest will he earn after 2 years?
   2. How much will be in his account after 2 years?
2. Referring to the last question: What if john earned compound interest, compounded monthly (same principal, same interest rate).
   1. How much will be in his account after 2 years?
   2. How much interest will he earn after 2 years?
   3. How much ***more*** interest does he earn with compound interest rather than simple interest?
3. Referring to the last question: What if John’s interest were compounded weekly?
   1. How much will be in his account after 2 years?
   2. How much interest will he earn after 2 years?
   3. How much ***more*** interest does he earn when its compounded weekly rather than monthly?
4. Ken earns simple interest at a rate of 3.4%. He has $4,529.22 in his account now.
   1. How much interest will he earn after 7 months?
   2. How much is in his account after 7 months?
   3. Using this amount, how much interest will he earn after another 7 months?
   4. How much is in his account after that additional 7 months?
5. Megan deposits $5,927.40 into a savings account. She earns compound interest, compounded quarterly.
   1. How much is in her account after 8 months?
   2. How much is in his account after a year and 4 months?